	Type	L #	Hits	Search Text	DBs	Time Stamp
1	BRS	L8	1601	(remove or removal or removed) near10 (multilayer or multi adj3 layer or organic or resist) near15 (chemical or electrochemcial)	USPAT	2002/07/23 12:42
2	BRS	L9	26	8 and (organic adj molecule)	USPAT	2002/07/23 12:42
3	BRS	L11	240	nm adj Ti	USPAT	2002/07/23 12:55
4	BRS	L12	35	(nm adj ti) same (nm adj au)	USPAT	2002/07/23 12:56
5	BRS	L13	2284	traces near10 (lines or rings)	USPAT	2002/07/23 13:15
6	BRS	L14	1742	traces near5 (lines or rings)	USPAT	2002/07/23 13:15
7	BRS	L15	1	14 and (multilayer adj5 resist)	USPAT	2002/07/23 13:17
8	BRS	L16	3	14 and (organic adj5 resist)	USPAT	2002/07/23 13:20
9	BRS	L17	134	14 and resist	USPAT	2002/07/23 13:38
10	BRS	L18	5	14 same (remove or removed or removing) same (residual or residuals or residue or residues)	USPAT	2002/07/23 13:44
11	BRS	L20	140	(multilayer or (multi adj5 layered) or (multi adj5 layers)) near5 Au	USPAT	2002/07/23 13:54
12	BRS	L21	26	20 and (residual or residuals or residue or residues)	USPAT	2002/07/23 13:54

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US-PAT-NO: 6333200

DOCUMENT-IDENTIFIER: US 6333200 B1

TITLE: Miniaturized immunosensor assembled from colloidal particles between micropatterned electrodes

---------- KWIC ---------

Shown are figures with some of the results from our experiments. The substrate for our sensor was created by photolithographic techniques, similar to the ones widely used today in the fabrication of electronic and computer chips. The design of the photolithographic mask of a basic "chip" is presented in FIG. 2. The masks and the photolithography were made by specialized contractors. The final samples were prepared onto glass substrates with 2 **nm Ti** and 150 **nm Au** layers deposited (FIG. 3a). In the experiments, the sensor chips were attached to a special holder onto the microscope stage, and electric leads to the electrodes were attached to the edges (FIG. 3b). A small flow-though chamber with volume of approximately 10 .mu.l was assembled on top of the electrode active area with adjacent small "corrals" for liquid insertion and removal formed by stripes of hydrophobic wax. Optical low-magnification and high magnification images of the active sensor area as seen through the microscope are presented in FIG. 4.

US-PAT-NO: 6356324

DOCUMENT-IDENTIFIER: US 6356324 B1

TITLE: Retardation film and method for producing the same, and liquid crystal
display device

---------- KWIC ---------

First, alignment layers 32a and 32b are formed on the substrates 31a and 31b
made of a glass plate or the like. Next, a material which can be patterned by
photolithography, such as a resist or a dry film is applied or attached
thereon, and resist layers 33a and 33b having a predetermined pattern are
formed by exposure and development. Next, an oxide film such as SiO.sub.2 or
ITO, or a metal layer such as Au, Ag, Al, Cu or the like is deposited by
sputtering on the resist layers 33a and 33b having the predetermined pattern as
underlying films 34a and 34b for the **organic molecule** thin film to be described
later (FIG. 5A). In the case where the underlying films 34a and 34b are formed
of Au, the Au layers may be deposited after Cr films on the resist layers 33a
and 33b.

Then, SiO.sub.2 layer were deposited as underlying films 34a and 34b on the
resist layers 33a and 33b by sputtering to a thickness of 200 angstroms. Next,
the substrates 31a and 31b were immersed in acetone (manufactured by Wako Pure
**Chemical Industries, Ltd.), and the resist layers were removed together with
the SiO.sub.2 layer deposited on the resist** layer by lift-off so that the
SiO.sub.2 layer were patterned.

Next, the substrates 31a and 31b were immersed in acetone (manufactured by Wako Pure Chemical Industries, Ltd.), and the resist layers were removed by lift-off together with the Au layers deposited on the resist layers, so that the Au layers were patterned.

wherein at least one region of the plurality of regions includes an organic molecule thin film, and

a tilt angle of liquid crystal molecules in the at least one region is different from tilt angles in regions of the plurality of regions not including an organic molecule thin film, whereby retardation in the at least one region and in the regions not including an organic molecule thin film are different from each other.

2. A retardation film according to claim 1 wherein differences in retardations between the at least one region and the regions not including an organic molecule thin film are in the range of about 90 nm to about 800 nm.

3. A retardation film according to claim 1, wherein the organic molecule thin film is made of either one of a silane coupling agent and organic molecules having a thiol group or a disulfide bond.

a first region having a first flat surface pattern and including an organic molecule thin film; and

a second region having a second flat surface pattern, wherein a tilt angle of liquid crystal molecules in the first region of the polymerized liquid crystal material including the organic molecule thin film is different from that in the second region, thereby retardation in the first region and in the second region

are different from each other.

6. A retardation film according to claim 4, wherein the **organic molecule** thin film is made of either one of a silane coupling agent and organic molecules having a thiol group or a disulfide bond.

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